SWIMMING AGAINST THE TIDE: OUTWARD STAFFING FLOWS FROM MULTINATIONAL SUBSIDIARIES

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Abstract

Studying the flows of parent country nationals in multinational enterprises (MNEs) to subsidiary operations has a relatively long tradition. Studying flows of subsidiary employees to other subsidiaries, as third country nationals, and to the corporate headquarters, as inpatriates, however, has empirically, much less pedigree. Drawing on a large-scale empirical study of MNEs in Ireland, this paper provides a benchmark of outward flows of international assignees from the Irish subsidiaries of foreign owned MNEs to both corporate headquarters and other worldwide operations. Building on insights from the resource-based view and neo-institutional theory, we develop and test a theoretical model to explain outward staffing flows. The results show that almost half of all MNEs use some form of outward staffing flows from their Irish operations. Although the impact of specific variables in explaining inter-organization variation differs between the utilization of inpatriate and third country national assignments, overall we find that a number of headquarters, subsidiary, structural, and human resource systems factors emerge as strong predictors of outward staffing flows.

Key words: global staffing, inpatriates, third country nationals, international assignments, resource-based view, institutional theory
Introduction

While the study of global staffing has a long tradition (Collings, Scullion & Dowling et al., 2009; Harvey & Moeller, 2009), these studies have focused heavily on flows of parent country nationals (PCNs) from the headquarters (HQ) to subsidiary operations (Edstrom & Galbraith, 1977; Harzing, 2001; Scullion, 1994; Tan & Mahoney, 2006). This generally presented as an alternative to host country nationals (HCNs) in staffing subsidiary operations. This literature resonates with conceptualizations of ethnocentric (Perlmutter, 1969) or centralized (Bartlett & Ghoshal, 1989) orientations towards multinational management, reflecting the perceived superiority of PCNs over their local counterparts. Recent research, however, has challenged this limited perspective and the changing topography of the global business environment over recent decades has emphasized the limited utility of unidirectional staffing policies (Harvey, Speier & Novecevic, 2001; Schuler & Tarique, 2007) and forced researchers and practitioners alike to re-evaluate such policies. Reflecting on this shifting emphasis, Tarique and Schuler (2008) have argued that this represents a changing focus from one driven primarily by the parent country to one more appropriately described as ‘global’.

In response, an emerging body of literature has directly addressed staffing flows from subsidiaries to the HQ. In this regard, following Harvey, Novecevic, and Speier (2000), we use the term inpatriate to represent employees from multinational subsidiaries transferred to the HQ on a permanent or semi-permanent basis. Much of the extant research in this area has been conceptual in nature (Harvey, Buckley, & Fung, 2005; Harvey et al., 2000) and there has been relatively little empirical work (for exceptions, see Harvey & Miceli, 1999; Peterson, 2003; Reiche, 2006; Tharenou & Harvey, 2006). While these studies have considered issues including inter alia, acculturation issues of inpatriate managers (Harvey & Miceli, 1999), and the purposes and critical success factors of such assignments (Reiche, 2006), there is little, if
any, available evidence on the extent to which MNEs actually utilize inpatriate assignments (cf. Tharenou & Harvey, 2006). Indeed, a recent case-based study of US MNEs in Ireland concluded “while the potential benefits of inpatriation for MNEs are relatively well established in the academic literature…it appears that its [inpatriation] application in practice appears limited” (Collings, Morley & Gunnigle, 2008: 210), suggesting limited use of such assignments in practice.

A second blind spot has been the limited focus on third country nationals (TCNs), defined as nationals of one country, working in a second country for a MNE headquartered in a third country (e.g. a US-owned MNE sends an employee from its Irish operations on assignment to its Singaporean operation). While some recent conceptual contributions have recognised the significance of TCNs as a staffing option (Gong, 2003; Tarique, Schuler & Gong, 2006), there has been limited work on the actual extent to which MNEs utilize TCNs in staffing global operations (for exceptions see Collings et al., 2008; Tungli & Peiperl, 2009). Apposite to this, it has been argued that TCNs may represent an important means by which MNEs can enlarge their managerial pool with the experiences to undertake international roles (Collings et al., 2008: 209). However, this potential has hitherto remained underexplored in the literature.

The lack of evidence on these aspects of global staffing is significant for two key reasons. Firstly, Harvey, Speier and Novicevic (2001) argue that changes in the globalization process may render traditional and unidirectional models of global staffing less appropriate for organizations operating in the global sphere. With the increasing location of foreign direct investment (FDI) in countries such as China, India and Central and Eastern Europe, the requirements of managers with both the skills and desire to operate in these locations may force MNEs to re-evaluate their staffing options (see also Scullion, Collings & Gunnigle, 2007; Tarique & Schuler, 2008). Second, it has been argued that the context for the
management of the traditional PCN international assignment has altered significantly, leading in some quarters to a fundamental reassessment of the contribution of, and prospects for, the international assignment as conventionally understood and an exploration of alternatives to the traditional international assignment (Collings et al., 2007).

While much recent debate has focused on alternative forms of international assignments such as short-term assignments, international business travel and virtual assignments, we argue that inpatriation and the increased use of TCNs in global staffing represent viable alternatives to potential over-reliance on traditional PCN assignments (Tarique & Schuler, 2008). Hence, further delineation of the actual utilisation of TCNs and inpatriation in MNE staffing and the factors which explain their deployment represents a valuable contribution to the literature. It will aid managers in understanding the circumstances in which inpatriates and TCNs might represent an appropriate staffing option. Given that the nature of inpatriate and TCN assignments differ significantly from traditional PCN expatriates, it is important for practitioners to have a clearer understanding of the characteristics of these assignment options more clearly.

Similarly, given the limited empirical evidence on both inpatriates and TCNs, the study also represents a valuable contribution to the academic literature in terms of delineating the factors which explain inter-organizational variation in outward staffing flows and will provide a solid base for future research in the area.

In exploring the nature of outward staffing flows from foreign owned MNE subsidiaries in Ireland, we develop a model drawing on the resource based view of the firm (see Barney, 1991) and neo-institutional theory (DiMaggio and Powell, 1983; Meyer and Rowan, 1977) which we subsequently empirically test. This model includes headquarter factors (e.g. country of origin), subsidiary factors (e.g. method of formation), structural factors (e.g. international integration) and HR systems factors (e.g. human resource
information systems). We begin with a brief summary on the inpatriation and TCN literature before setting out our theoretical model and describing the methodology employed. After detailing our empirical results, we conclude by discussing the implications of our findings.

**Inpatriates**

Inpatriates are significantly different from other forms of international assignments\(^2\). At a basic level, they can be differentiated by virtue of the fact that they involve the transfer of employees from a foreign subsidiary to the HQ of an MNE but there are further and more complex differences. There has in recent years been some debate as to the usefulness of the term inpatriate. Some have been critical of the term, arguing that it refers to another category of expatriate staff and represents an ethnocentric view in firms from large and dominant economies (Torbiorn, 2005). Others (Dowling, Festing & Engle, 2008) illustrate the confusion associated with differing definitions of inpatriation and question the value added by the term. However, we contend that the fact that the role and experience of inpatriates is likely to be significantly different to other categories of international assignees and therefore the term has conceptual merit. Reiche (2006) similarly recognises the failure to differentiate between inpatriates and expatriates as distinct categories of staff and hence the idiosyncrasies of the former group are ignored.

It has been further argued that the potential impact of inpatriate managers could be more significant than their PCN counterparts since much of the high value added activity of MNEs, such as research and development, upper management team tiers, tends to be retained in the home country. In this regard Scullion and Collings (2006) synthesize some of the key opportunities arising from inpatriate assignments. Such assignments can facilitate the development of a multicultural perspective at the MNE HQ. As part of a global network, such assignees can act as “linking pins” between foreign subsidiaries and HQ. Such a boundary
spanning role can aid the MNE in effectively competing globally (Harvey et al., 1999). Inpatriation also facilitates the embedding of employees from outside of the MNE’s country of origin into the organization, while potentially providing them with defined career paths, and facilitating the learning of organizational cultures, values and decision making processes (Harvey et al., 2001). Similarly, the return of inpatriates to their home country on completion of their assignment can aid the localization process, which is an increasingly important strategic objective for MNEs (Evans, Pucik & Barsoux, 2002). Such returning inpatriates should have a greater appreciation of the subsidiary’s role within the MNE’s global network and a more developed global mindset.

**Third Country Nationals**

Although there have been a number of recent contributions (cf. Collings et al., 2008; Gong, 2003; Tarique & Schuler, 2008), there is little extant literature on the use of TCNs in staffing MNEs. Nonetheless, the literature points to some potential benefits associated with such assignees. TCNs can be socialized effectively into the corporation and generally are considered to represent a lower cost option, in terms of salary and benefits, than their PCN counterparts. Furthermore, they are potentially better informed about the host country environment than PCNs, and might reduce language barriers when they are transferred from a country that shares a language with the subsidiary (Dowling et al., 2008). Finally, TCNs may be more willing to accept an international assignment than their PCN counterparts due to more limited labor market opportunities in their country of origin, hence expanding the recruitment pool within the MNE (see also Tarique & Schuler, 2008). Briscoe, Schuler, and Claus (2008) argued that TCNs also are more likely to be deployed in situations where there is relatively free movement of people from country to country, such as the European Union.
Thus TCNs can represent an important staffing option for MNEs and merit study in their own right.

**Theoretical Framework**

In developing the theoretical framework that underpins the current study, we draw on the resource-based view (RBV) of the firm (see Barney, 1986, 1991; Wernerfelt, 1984) and neo-institutional theory (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). The RBV posits that sustained competitive advantage can be generated from firm resources, defined as “assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm” (Barney, 1991, p. 101) that are valuable, rare, inimitable, and non-substitutable. This is true provided that these resources are identified and deployed effectively. Appositely, neo-institutional theory offers a useful counterbalance to the RBV in our theorizing on outward staffing flows, as it allows consideration of the social context within which resource selection decisions are embedded (see also Oliver, 1997).

A key premise of the RBV is that resource endowments are not easily transferable; hence, sustained competitive advantage is derived from the firm possessing and using various resource combinations (Barney, 1991). Given that managerial resources are potentially one of the more important strategic resources of the firm (Holcomb, Holmes, & Connelly, 2009; Tan & Mahoney, 2003), flows of managerial talent from subsidiaries may represent a key source of sustainable competitive advantage in the MNE. Indeed, the RBV focuses directly on the potential value of the firm’s internal asset stocks for conceiving and executing corporate strategies (Morris, Snell, & Wright, 2006). Stahl et al. (2007) further argued that international assignment experience is valuable and hard to imitate and can create competitive advantage in itself. Looking specifically at subsidiary managerial talent, Tan and Mahoney (2003, p. 183) identify three key contributions that they can make to the MNE. First, they can implement the
MNE’s strategies to achieve economies of scale and coordination. Second, they can facilitate access to valuable local resources. Third, they can help integrate resources and capabilities from different subsidiaries into “transnational” capabilities (see also Bartlett & Ghoshal, 1989). Similarly, McWilliams, Van Fleet, and Wright (2001) identified two benefits of the global workforce in the context of the RBV: (1) capitalizing on global labor pools by drawing on diverse labor pools to meet the different needs of the firm, and (2) exploiting the cultural synergies of a diverse workforce by drawing on diverse perspectives in managerial decision making (see also Morris et al., 2006, for a discussion). The RBV, however, can be criticized for failing to account for organizational context or the external environment (Paauwe & Boselie, 2003).

Appositely, neo-institutional theory emphasizes the influence of the societal or cultural environment on organizations (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott, 2008). These influences represent the norms, values, and taken-for-granted assumptions that frame decisions regarding what constitutes appropriate or acceptable behavior. Formally defined, institutions “comprise…regulative, normative and cultural cognitive elements that, together with associated activities and resources, provide stability and meaning to social life” (Scott, 2008, p. 48). Hence, firm behavior is not always rational and institutional theorists emphasize the extent to which firm behaviors are socially defined and hence compliant, habitual, and unreflective (Oliver, 1997). This results in isomorphism, defined as a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions (DiMaggio & Powell, 1983, p. 149).

DiMaggio and Powell (1983) identified three key drivers of isomorphism. First, coercive isomorphism results from imposing patterns of behavior by a powerful constituency (e.g., government). In situations of uncertainty, mimetic isomorphism results from organizations replicating patterns evident in organizations perceived to be successful. Finally,
normative isomorphism results from professional organizations such as universities or consultancies disseminating organizational practices within a field.

A key tenet of institutional theory is the idea that to become accepted, organizations must be perceived as legitimate within the organizational field in which they operate. Hence legitimacy, “…the generalised perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Suchman, 1995: 574) represents a central construct in institutional theory and something which often impacts the adoption of organizational forms or practices (see Deephouse & Suchman, 2008). Legitimacy is seen as vital for organizational success and survival since without it, critical resources may be withheld, withdrawn or simply unavailable (Meyer & Rowan, 1977). In an international context scholars point to the requirement for the MNE subsidiary to be legitimate in the host country (external legitimacy) as well in the eyes of the HQ (internal legitimacy). This polemic has been conceptualized as the management of ‘institutional duality’ (Kostova & Roth, 2002). Thus institutional theory offers a counterbalance to the rational perspective proposed by RBV, by recognizing the impact of societal expectations and institutions on managerial decisions. For example, the institutionalized nature of control mechanisms in MNEs of US origin (Ferner et al., 2004; 2007) may decrease the likelihood of outward staffing flows in US owned subsidiaries. Similarly, the legitimacy which the subsidiary operations enjoy in the MNE network may significantly influence on outward staffing flows, with higher levels of legitimacy developed through factors such as length of establishment positively influencing on outward staffing flows.

Differentiating between four key sets of influence on outward staffing flows and drawing on the RBV and institutional theory we develop a theoretical framework (see Figure 1). The selection of the specific independent variables is informed by the RBV, neo-
institutional theory and the extant international assignment literature but also by pragmatic considerations, i.e. having reliable measures and a sufficient sample size to allow useful analysis.

**TAKE IN FIGURE 1 APPROXIMATELY HERE.**

**Headquarters Factors**

We argue that several HQ factors will influence how resources within subsidiaries are evaluated and hence impact outward staffing flows to the HQ and other subsidiaries.

Notwithstanding trends toward global convergence of organizational forms predicted by institutional theory, we postulate that an MNE’s country of origin will impact outward staffing flows. As organizations within the same population become similar, or isomorphic, they are influenced over time by similar regulative, cognitive, and normative institutional influences (see DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott, 2008). For example, a well established body of literature points to the country of origin as a significant explanatory factor in predicting flows of PCN expatriates, with Japanese firms most likely to use PCNs and U.S. firms least likely. European firms tend to be more heterogeneous, with UK firms closest to their U.S. counterparts and German firms more closely resembling Japanese MNEs (Brewster & Scullion, 1997; Harzing, 1999; Kopp, 1994; Tung, 1982). This divergence is largely explained by the differing orientations towards controlling foreign subsidiaries. Specifically, U.S. MNEs tend to rely to a greater degree on formalized, centralized control through standardized policies rather than PCNs (see Ferner et al., 2004). Conversely, Japanese firms rely more on personal control through PCN assignees (Harzing, 2001). This literature also suggests that U.S. MNEs tend to be relatively ethnocentric in orientation (Ferner et al., 2004) and less open to ideas from subsidiaries (Edwards et al., 2005). Consequently, our first hypothesis is as follows:
**H1:** The use of a) inpatriates and b) TCNs will vary according to the nationality of the MNE.

We predict that MNE size, measured by worldwide employment of the MNE, also will impact staffing flows. In this regard DiMaggio and Powell (1983, p. 152) point to the key role that external consultancies play in reducing diversity among larger firms. They argue that a small set of major consultancies spread a few organizational models throughout the organizational field. Although smaller firms may catch up with larger firms through mimetic isomorphism, they may not have the resources to develop specific organizational practices fully. As Tregaskis, Heraty, and Morley (2001) argued, “larger organisations, by their nature and structure…are…more likely to have the resources to invest in sustaining an internal labour market” (p. 45). A growing body of literature points to greater emphasis on developing global competence and building global talent programs (Cascio & Aguinis, 2008). In this regard, drawing on talent pools beyond the home country through, for example, the deployment of TCNs or inpatriates emerges as a key means of globalizing the workforce (Harvey et al., 2000, 2001).

**H2:** Larger MNEs, measured by worldwide employment, will be more likely to display flows of (1) inpatriates and (2) TCNs than smaller MNEs.

Institutional theory also predicts similarity in industries as conformity to common norms and expectations results in the diffusion of common knowledge and understandings (Oliver, 1997) that translate into common practices. In this regard, the key insight is that the extent to which a firm requires an understanding of local institutions, culture and norms will have a significant impact on resource requirements in the host operations and, in situations in which an understanding of local contexts within the MNE is important, we might expect higher levels of outward staffing flows. Given that service organizations require a greater understanding of the local context owing to the requirement to be more responsive to local...
customers, we predict greater outflows of inpatriates and TCNs in organizations in the service sector. TCNs, although not directly from the host location, generally will have a greater knowledge of the host culture than PCN expatriates, due to the spatial proximity of many TCNs’ home country to the country in which they are assigned (Reynolds, 1997). Specifically, inpatriates and TCNs may be deployed in services firms to further understanding of the local context.

**H3:** Service sector MNEs will be more likely to display flows of (1) inpatriates and (2) TCNs compared to manufacturing firms.

**Subsidiary Factors**

Subsidiary characteristics also are likely to influence the nature of resources available and to impact outward staffing flows significantly. In this regard, the method of company establishment in the host environment (i.e., whether the MNE was established in Ireland through a merger/acquisition or greenfield site) is likely to be a key explanatory factor. From a resource-based perspective, Penrose (1959) discussed the prerequisite of “managerial slack” for growth. Put simply, in the context of our theorizing, if a subsidiary does not have such slack (excess managerial talent), then it is less likely to transfer subsidiary employees as inpatriates or TCNs. In subsidiaries formed through acquisitions, it is more likely that there may be excess managerial talent in the subsidiary as the newly acquired subsidiary will be able to draw on MNE resources to exploit economies of scale and to complete tasks traditionally done in the unit. Such transfers will assist the MNE in taking advantage of knowledge, skills and capabilities in the subsidiary and ensure that they are appropriately leveraged and further aid the integration of subsidiary capabilities and resources into transnational capabilities (Bartlett & Ghoshal, 1989).

**H4:** Flows of (1) inpatriates and (2) TCNs will be more common in subsidiaries established through an acquisition/merger.
We also might expect the age of the subsidiary to influence staffing flows. Subsidiaries represent a means by which MNEs exploit ownership-specific advantages (Erikkson, Johanson, Majkard, & Sharma, 1997), and hence a subsidiary’s experience in the local environment can generate knowledge, which is valuable to the parent (Makino & Delios, 1996). From an institutional perspective, longer established operations are more likely to have outward staffing flows as they will have had more time to develop local knowledge and build internal legitimacy (Kostova & Roth, 2002). Higher levels of internal legitimacy are likely to translate into perceived higher levels of competence in subsidiary operations and a greater desire to share subsidiary knowledge around the MNE network. This may be achieved through inpatriate and TCN flows out of the subsidiary.

H5: Older subsidiaries will be more likely to report flows of (1) inpatriates and (2) TCNs.

Linked to the preceding point, the size of the subsidiary operations, measured by employment in the host country, is likely to influence staffing flows. In this regard, Newburry (2001) noted that larger offices are likely to be assigned larger international clients. Further, Johnson and Menguc (2007) argue that increasing size results in increasing subsidiary interdependence with the HQ and other subsidiaries within the MNE. Building on earlier contributions (Kumar & Seth, 1998; Prahalad & Doz, 1981), they argue that this results in a greater need for the HQ to coordinate an increasingly complex network (see also Newburry, 2001). We argue that outward staffing flows may represent an effective means of maximizing the efficient allocation of resources and integration within the MNE’s global network. Flows of inpatriates will facilitate the transfer of knowledge to the HQ, while at the same time reinforcing corporate culture among the assignees, who can transfer this to the subsidiary on their return. Likewise, the transfer of TCNs will facilitate the transfer of knowledge around
the MNE’s global network. Thus, we predict that increased size will positively impact outward staffing flows.

**H6: Larger subsidiary operations, measured by employment numbers, will more commonly report flows of (1) inpatriates and (2) TCNs than smaller operations.**

The final subsidiary level factor that we propose is the subsidiary holding a role as a regional or divisional HQ within the MNE. In this regard, one would expect higher levels of staffing flows out of regional or divisional HQs. Such regional or divisional hubs are the centre of the organization’s knowledge about the operations in the region or indeed division. These operations also may contain specialist product or functional staff with key knowledge about operations in the region/division (Englehoff, 2001). Given the expertise in such regional/divisional HQs, it is likely that such staff will be transferred to other subsidiaries (as TCNs) to either transfer knowledge, “position fill” or even for control purposes. Transfers to the HQ also are possible but such transfer most likely may be premised on knowledge transfer motives, although management development reasons also may come into play.

**H7: Subsidiaries with a headquarter role within the MNE’s global network will be more likely to report flows of (1) inpatriates and (2) TCNs.**

**Structural Factors**

Building on the preceding point, we turn next to what we classify as structural factors. Here, we focus on factors that impact the extent to which the subsidiary is interdependent with the MNE’s global network and how the MNE structures its international operations more generally. These are likely to have a significant influence on how subsidiary resources are viewed in the HQ and the extent to which the HQ and other subsidiaries wish to draw upon the resource endowments through international assignees. We adopt Robinson’s (1995, p. 188) definition of interdependence as the “extent to which work processes are interrelated so that changes in the state of one element effects the state of the others”. In instances of high
levels of interdependence, MNEs will have a greater desire to integrate subsidiary units within the MNE network (Newbury, 2001). For example, Reiche’s (2006) study found that bilateral knowledge transfer was the main driver of inpatriate assignments. This may be based on an increasing realization that a MNE’s competitive position is shaped by the nature of the “organizational competencies” it possesses and how the firm transfers these across its organization (Taylor, Beechler, & Napier, 1996). As Edwards, Rees, and Coller (1999) noted, “where production is uniform and interdependent across borders, the HQ has an incentive to manage these linkages” (p. 288). We postulate that the degree of integration between the Irish subsidiary and other foreign subsidiaries and the HQ will be positively associated with flows of international assignees out of the subsidiary. Such internalized structures generate efficient knowledge transfer that may provide the basis for competitive advantage (Heinsz, 2000).

**H8:** Flows of (1) inpatriates and (2) TCNs will be more common from subsidiaries that are integrated with other operations within the MNE network.

We also point to the impact of international business structures in explaining outward staffing flows. While we know relatively little about the impact of international business structures on staffing flows, we expect that outward staffing flows are more likely in situations in which business structures are relatively complex. Such complexity is likely to bring with it greater coordination challenges than simpler international business structures and create a challenge for the MNE in achieving economies of scope and coordination (Tan & Mahoney, 2003). The use of inpatriate and third country assignments may assist in addressing these challenges.

**H9:** Flows of (1) inpatriates and (2) TCNs will be more common in MNEs with a matrix international business structure.

**HR Systems Factors**
Finally, we consider HR systems factors (i.e. corporate level HR processes). We view these as key in structuring firms to take advantage of subsidiary level resources to attain competitive advantage at the global level (Barney, 1991). Lado and Wilson (1994) argue that a firm’s HR systems can contribute to sustained competitive advantage by facilitating the development and utilization of organizational competencies (see also Wright, Dunford & Snell, 2001). Indeed, Stahl et al.’s (2007) study of talent management points to the role of appropriate HR tools and systems in identifying key talent and facilitating the talent management process. Torbiorn (2005: 61) similarly argues that global talent tracking and recruitment systems are linked to an increase in lateral transfers across international operations in terms of TCNs and inpatriates for learning or training. We therefore argue that evidence of systematic tools targeted at calibrating talent on a global basis and identifying high potential employees, combined with a succession planning system will be positively associated with outward staffing flows in subsidiary operations. Specific examples of such tools include global succession planning systems and HR information systems which collate data on the firm’s international workforce.

A further system which merits discussion is the existence of a global HR policy formation body. Ferner et al. (2007) argue that the way in which the HR function is organized may be critical in providing organizational capabilities in the MNE (see also Tregaskis, Glover & Ferner, 2005). Similarly, Taylor et al. (1996) identify the failure to have regional or global meetings of affiliate HR directors as a significant barrier to the development of an integrative strategic international HR orientation. The existence of such a body is likely to aid the identification of key talent around the MNE’s global operations and facilitate their transfer beyond their national subsidiary (McDonnell, Lamare, Gunnigle & Lavelle, 2010). We would expect the presence of a representative from the Irish operations on
such a HR policy body to be particularly significant in explaining the extent to which such bodies are associated with flows out of the subsidiary.

It is also likely that MNEs which utilize PCN expatriates will be more likely to use both inpatriates and TCN assignees. We argue that such firms have a tradition of using international assignments. Such MNEs stand in contrast to MNEs which have a policy, or at a minimum, a tradition of minimizing flows of international assignees, often for cost reasons (see Collings et al., 2008). Thus we argue that firms which have a tradition of deploying international assignees recognize the potential of such assignments in implementing the MNE’s strategies to achieve economies of scale and coordination and in facilitating the integration of resources and capabilities from different subsidiaries into ‘transnational’ capabilities.

On balance we argue that these human resource systems factors combine to facilitate MNEs in maximizing ownership specific advantages, in this instance managerial capability and local knowledge, through the international transfer of subsidiary staff through inpatriate and TCN assignments.

H10: Sophisticated human resource systems aimed at identifying and calibrating talent on a global basis will be positively associated with flows of a) inpatriates and b) TCNs.

Ireland: Locale for Studying Expatriate Staffing Flows

Geographically, Ireland is well located. It is within a six hour flight of the east coast of the US and considerably closer to most European capitals. Further, Ireland is a stable democracy with a relatively well-educated workforce and good cohort of managerial talent with experience of working in the multinational sector. As Begley, Delany and O’Gorman (2005: 209) surmise

…the early dominance of American FDI as a training ground for cadres of Irish managers has reaped tangible benefits. An Irish executive observed, ‘we learned our business skills from American companies, so we are familiar with them’.
Despite being a small island economy, Ireland benefitted disproportionately from the 1990s global FDI boom. Indeed, during the period 1993–2003, Ireland was the largest net FDI recipient in the Organisation for Economic Co-operation and Development (OECD, 2006). This also is manifest with respect to employment provided. The proportion of employment in foreign owned companies, as a percentage of total international trade related employment in Ireland, is the highest in the world (UNCTAD, 2007). The U.S., by some considerable distance, is Ireland’s largest source of FDI. For example, investment from the U.S. in 2006 alone totaled $13.3 billion, almost double that from US FDI to all South American countries (Hamilton & Quinlan, 2008).

Consequently, for a large number of MNEs, Ireland is likely to represent an important host for their investment and furthermore, it has the potential to provide some experienced managerial talent which may be deployed within the MNE.

Method

This paper draws on representative data from a study on the human resource (HR) practices of MNEs in Ireland (see Lavelle, McDonnell & Gunnigle, 2009). A structured questionnaire was used which considered five aspects of human resources management (HRM) – the HR function, pay and performance management, employee representation and consultation, employee involvement and communication, and training, development and organizational learning. Dichotomous, multiple choice, list, ranking and quantity styled questions were used, along with a small number of open-ended questions. Whilst Irish owned MNEs were included in the study, this paper focuses solely on foreign owned firms.
Foreign owned MNEs are defined as all wholly or majority foreign owned organizations operating in Ireland, with 500 or more employees worldwide and 100 or more employed in their Irish operations.

After undertaking detailed work on developing a population of MNEs, we arrived at a listing of 491 foreign owned MNEs and 72 Irish owned MNEs – a combined total of 563 MNEs (see McDonnell, Lavelle, Gunnigle, & Collings, 2007, for comprehensive detail on how the population was developed). The population then was stratified by country of ownership, sector and size, with a sample of 423 companies selected. Of this sample, 46 companies subsequently were removed due to (1) ceasing operations, (2) not meeting the selection criteria, or (3) double-counting. Consequently, an additional 37 companies were added from the residual population to compensate for these losses, and the total valid sample of MNEs for the fieldwork was 414.

The survey was administered through structured personal interviews with the most senior HR practitioner able to answer for all of the Irish operations. These were almost exclusively the country HR director or manager. In a small number of cases in which it was not possible to speak to someone able to answer for all of the Irish operations, respondents answered for the largest site/division in Ireland. The personal interview approach was adopted for two key reasons. First, it is believed to produce higher response rates (Baruch & Holtom, 2008). Secondly, it is likely to reduce the amount of missing data (McKnight, McKnight, Sidani, & Figueredo, 2007). The interviews were conducted between June 2006 and February 2007 by two university researchers and a number of interviewers from an independent economic and social research institute. To reduce potential bias from this administrative approach, a book of instructions that included definitions of key terms was provided and a half day training course ensured clarity and standardization among all interviewers. A number of checks also were conducted when the study was completed to establish if any differences
in responses gathered by the different interviewers existed. No evidence of significant differences was found. The survey yielded 213 questionnaires from foreign-owned MNEs, a response rate of 60%. We also checked for response versus non-respondent bias by analyzing respondent organizations against two criteria (country of origin and sector) collated from the population development stage. These tests found that respondents were aligned closely with the MNE population and thus we did not need to re-weight the data. Data were inserted into the statistical package SPSS version 15, which was used for the subsequent analysis.

**Statistical analysis**

We first dummy coded our two staffing outflow variables. The first regression explores outflows to the parent company HQ, i.e., *in-patriates*, where the value 1 designates the Irish operations have staff on assignment in the parent company HQ and 0 signifies they do not have any. The second regression relates to *TCNs*, where 1 signifies there are assignees from the Irish operations on secondment in other parts of the worldwide company and 0 is where there are no such assignees. Following this coding, binomial logistic regression is used, given that the two dependent variables are dichotomous. This type of regression analysis is particularly useful when exploring the presence or absence of a characteristic or outcome based on the values of a set of independent variables.

We performed a number of tests for collinearity between the predictor variables to establish if the regressions provide correct estimates of the coefficients that are attributed to each predictor variable. The results showed collinearity was not an issue and thus we concluded that the variables provided independent measurements within the regressions. The lowest tolerance level found was 0.642 and the largest variance inflation factor (VIF) result was 1.558. These measures highlight whether a predictor has a strong linear relationship with other predictor variables, with the convention that no multicollinearity problem exists when the VIF is less than 4.0 and the tolerance level is greater than 0.2 (Menard, 1995). The
correlation matrix shows no sign of a multicollinearity problem. Finally, we explored the condition index. High proportions on the same eigenvalue indicate a multicollinearity issue (Field, 2005) but this did not emerge with our data. We now set out the independent variables used in the regression analyses in Table I.

TAKE IN TABLE I APPROXIMATELY HERE.

Results

Outward staffing practices of foreign MNEs in Ireland

Almost half the MNEs (46%) indicated there are employees from the Irish operations on assignment somewhere in the worldwide operations (to either the parent country or third country operations). U.S.-owned MNEs (56%) were the most likely to report international assignees on assignment elsewhere in the worldwide company. UK-owned MNEs were least likely, with just a quarter reporting outward staffing flows.

A quarter of all Irish operations reported inpatriates, with 38% reporting outflows to operations outside of the parent country. More specifically, the results show 21% of firms only have outflows to third country operations and 9% only have outflows flows to the parent country HQ. The remaining 16% currently have staff from the Irish operations in both the parent country HQ and other worldwide subsidiaries.

We find a range of between one and thirty employees on assignment in the parent country HQ. The great majority (71%), however, report having between one and three inpatriates. We find a slightly smaller range of one to twenty for TCNs; 65% of these reported one to three expatriates on foreign assignment from the Irish operations.

Inpatriate staffing influences

Both regression models demonstrate high explanatory power, typified by chi square significance at \( p < .001 \) and good pseudo R-square measures (inpatriates Nagelkerke \( R^2 \) of 0.587 and TCNs Nagelkerke \( R^2 \) of 0.471). The nonsignificance values found in the Hosmer
and Lemeshow tests are further indications of a model that adequately fits the data. We now examine the influences on staffing outflows beginning with inpatriate flows (see Table II).

TAKE IN TABLE 2 APPROXIMATELY HERE.

Country of origin was a significant explanatory factor. Specifically, German-owned MNEs were less likely to report inpatriate flows compared to U.S.-owned MNEs ($p < .05$). The other countries did not show any statistical differences to U.S. MNEs. The largest MNEs (> 60,000 employees worldwide) also emerged as most likely to report the use of inpatriates ($p < .1$). Surprisingly, service sector MNEs were significantly less likely to have inpatriates relative to manufacturing MNEs ($p < .01$).

The method of establishment also exerted a statistically significant effect. In particular, where entry to the Irish “market” was through a merger or acquisition, the Irish operations were more likely to report inpatriates than those that were established on a greenfield basis ($p < .01$). The size of the host operations also was significant. The largest operations (> 1,000 employees) were three times more likely to have staff seconded to the parent company HQ compared to those with 100 to 499 employees ($p < .1$).

International integration of the MNEs’ global operations exerted a particularly strong effect. In particular, where there was no integration, the Irish operations were significantly less likely to report inpatriates than where there was two-way integration ($p < .05$).

All four indicators of international HR systems factors proved significant. Where the Irish operations were covered by a global succession planning system, they were more than three times more likely to have inpatriates than where there was no global system ($p < .05$). MNEs with a human resource information system (HRIS) containing data on the firm’s international workforce were more than four times more likely to report inpatriate assignments relative to MNEs without a HRIS ($p < .05$). Two interesting effects were found concerning global HR policy formation committees. Specifically, the results show that MNEs
having an Irish representative on the global HR policy formation committee vis-à-vis those without such a committee were significantly more likely to have staff seconded to the parent company HQ, with an odds ratio of 2.581 ($p < .1$). On the other hand, the Irish operations were less likely to have inpatriates where there was no Irish representative on this committee ($p < .1$). Finally, expatriate inflows also were significantly associated with the use of inpatriates ($p < .05$).

In summary, no support was found for hypotheses H5, H7 and H9. Additionally we found the opposite to our predicted sectoral effect in H3. Support, at least partial, was found for all remaining hypotheses with respect to inpatriates.

**Third country national influences**

We turn now to third country nationals (see Table III).

*TAKE IN TABLE 3 APPROXIMATELY HERE.*

Country of origin again was statistically significant, albeit with a different effect. UK-owned MNEs were significantly less likely to have third country national outflows vis-à-vis U.S.-owned firms ($p < .01$).

As with the inpatriate model, subsidiary size was statistically significant. Specifically, the larger the Irish workforce, the greater the likelihood of third country outflows ($p < .05$).

International integration emerged as significant. Specifically, firms displaying one-way integration between the international operations were less likely to have third country outflows compared to two-way integration ($p < .1$). International business structures also were significant. In particular, where there was only one international business structure in existence, the Irish operations were less likely to have staff on secondment in the foreign subsidiaries compared to where there was a matrix structure ($p < .05$).

Turning to the HR systems factors, global succession planning again was significant. Irish operations that were covered by a global system were three times more likely to have
third country outflows than MNEs without a global system \((p < .01)\). The final predictor variable – expatriate inflows – also was significant \((p < .01)\). Where the Irish operations reported international assignees from the parent company (from either the parent country or third countries), they were six times more likely to have staff on secondment in third country operations.

With respect to third country outflows, hypotheses H2, H3, H4, H5 and H7 were not supported with the remaining hypotheses in receipt of varying degrees of support.

**Discussion and Conclusions**

This study sheds some considerable light on flows of staff from multinational subsidiaries to other parts of MNEs global operations. Our findings indicate that staffing flows from subsidiaries to the HQ and other subsidiaries are quite common. Although the absolute number of both types of assignee tends to be small (the median was two assignees in both instances), inpatriates and TCNs, in particular, are used in a wide range of MNEs. Thus our findings support the notion that the nature of international staffing has shifted from an ethnocentric home country model to a more global or transnational one (Collings et al, 2007; Harvey et al., 2001; Tarique & Schuler, 2008).

Our findings suggest that MNEs are particularly likely to exploit the resource of subsidiary managers through inpatriate assignments and TCN assignments in instances where the subsidiary is large and well integrated with other subsidiaries. This may be because larger subsidiaries are more likely to be assigned bigger international clients (Newbury, 2001) and increasing size will result in increasing subsidiary interdependence with the HQ and other subsidiaries within the MNE (Johnson & Menguc, 2007). This would seemingly support the idea that in such instances there is a greater need for the HQ to coordinate an increasingly complex network to exploit the resources available in the subsidiary fully (Kumar & Seth, 1998; Prahalad & Doz, 1981). This is likely to require a higher degree of knowledge of
subsidiary operations combined with greater awareness among subsidiary managers of the subsidiary’s role within the global network. Building on the strategic international HRM literature, HR systems should focus on the specific organizational competences required to secure competitive advantage in a global context, regardless of where they originate (Taylor et al., 1996: 960). Interdependent production within the MNE incentivizes the HQ to manage these linkages (Edwards et al., 1999). Outward staffing flows appear to be a useful means of exploiting such resources and inpatriates and TCNs can provide an important link in this network and facilitate and co-ordinate challenges which larger MNEs face.

Our data also shed light on the role of what we term ‘HR systems’ factors in facilitating outwards staffing flows. In line with the RBV, our data supports the idea that firms must have structures in place to exploit resources to attain competitive advantage. This aligns with Boxall’s (1996) distinction between human resource advantage and organizational process advantage. The former refers to the advantage stemming from a superior human capital pool, while the latter refers to advantage owing to superior processes for managing human capital. In this regard, our data point to the key significance of HR systems (organizational process advantage) in explaining flows of inpatriates and TCNs from the subsidiary. Prominent here was the existence of a global succession planning system. It appears that such HR systems factors are particularly important in determining flows of inpatriate staff to the HQ. Such flows are four times more likely in MNEs with HR information systems and more likely in situations where there is an Irish representative on the global HR policy formation body. Such factors are likely to facilitate the identification of subsidiary talent to corporate decision makers (McDonnell et al., 2010; Stahl et al., 2007; Torbiorn, 2005). This finding is broadly in line with our expectations based on the literature. For example, it has been argued that it is more difficult for subsidiary managers to gain attention at the corporate HQ owing to the limited information on subsidiary talent available...
to key decision makers in the HQ (bounded rationality) amongst other factors (see Mellahi & Collings, 2010). Recently Stahl et al. (2007) pointed to the key role of appropriate tools and systems in identifying key talent and facilitating the talent management process. It is also in line with Torbiorn’s (2005: 61) argument that global talent tracking and recruitment is associated with outward staffing flows for learning or training. This finding has important implications for the broader global talent management literature and indeed HR practice, and highlights the key role played by appropriate human resource information systems in identifying and facilitating the appropriate deployment of high potential and high performing employees around the MNE’s global network.

Additionally our study finds evidence of the impact of institutional context on management practice, and specifically outward staffing flows. For example, as predicted, the country of origin and size of the MNE measured by global employment emerge as significant in influencing staffing flows. Thus, as predicted by neo-institutional theory the social context within which resource selection decisions are made (Oliver, 1997) does indeed influence outward staffing flows.

Although our analysis confirms high explanatory power of our theoretical model, there are differences in flows between TCN and inpatiate assignees, suggesting merit in exploring them independently in future studies. Thus our study provides further support for the idea that inpatriates and TCNs are conceptually distinct and that the antecedents for each are different.

It is important to note that a good degree of variance in outward staffing flows is not explained by our model. These findings are not inconsistent with other studies which point to the importance of context and pragmatism in explaining flows of both TCNs and inpatriates from Irish subsidiaries of MNEs (Collings et al., 2008). In this regard, Torbiorn (2005), based largely on a consideration of Harzing’s (2001) data set, proposes a complementary ad hoc reactivity hypothesis. Specifically, he argues that some 25 per cent of the variation in staffing
remains unexplained in Harzing’s model. While acknowledging that some of the variation might be explained by variables not included in her analysis, the possibility also exists that staffing decisions may be premised on short term reactivity or restricted on the best decision based on a limited pool of candidates. Much of this research finds that international assignees are often selected and deployed quickly in reaction to a crisis in some foreign operation and hence may not be strategically planned (see Anderson, 2005; Harris & Brewster, 1999). This appears to be particularly relevant with regard to TCN assignments. Despite the fact that these assignments are used in a greater percentage of MNEs than their inpatriate counterparts are, the factors in our model are less significant in explaining outflows.

**Limitations and Avenues for Further Research**

Although our study provides some interesting insights into outward staffing flows it is not without its limitations. First, we draw on data from only one host country. Although Ireland is an important location for FDI, it is an open economy where the multinational sector generally enjoys a high level of legitimacy and influence. We would therefore argue that our findings are potentially generalizable to MNEs operating in other open, Anglophone economies. However, it would be interesting to explore outward staffing flows in other host locations which would help to expand the generalizability of our findings.

Second, our study was conducted at the organizational level rather than the subsidiary plant level. In this regard, perhaps different subsidiaries may have different roles and different mandates within the host country might explain further variance. Hence we end up with aggregated detail on the Irish subsidiaries of each organization which may miss some of these nuances. It may be that a study at the subsidiary or plant level may provide further interesting insights.

Third, the present study did not explore the motives for the deployment of such assignments. Indeed, further studies which explore the rationale for both inpatriate
assignments and TCNs would be a useful addition to the literature (this is discussed to a degree in Tharenou and Harvey, 2006).

Further, it could be that a degree of the variance unexplained by our model results from our choice of theoretical underpinning which focused our research effort in terms of the variables which we explored. Looking at a range of factors which are unexplored in the current study could provide further insights into the topics under study.

A further limitation of our study is that although we find a strong correlation between expatriate inflows and both TCN and inpatriate outflows, we cannot comment on the scale of the inflows. While some support for the substitution argument which we develop above exists, it might well be that while the expatriation of PCNs might be a more formalized and frequently used staffing option, there are still very limited structures for TCNs and inpatriates in place. Whether a firm uses many expatriates, may therefore, be a poor indicator of the use and sophistication of other international staffing options. This is an area which clearly merits further study.

A further avenue for study relates to the outcomes of both inpatriate and TCN assignments. At the firm level, some conceptual work has focused on the knowledge transfer aspect of inpatriate assignments. However, empirical insights are limited. The role of such assignments in facilitating control and coordination in MNEs would be a useful addition. Equally at the individual level it would be worthwhile to explore the implications of inpatriate and TCN assignments for individual development and career success.

Linked to the preceding point, scholars have pointed to the need to consider the factors which impact on the success or failure of inpatriate and TCN assignments (Collings et al., 2009). In this regard such research might draw on work on the expatriate cycle and focus on specific aspects of the inpatriate cycle to explore how factors such as selection, training and adjustment impact on inpatriate performance and success.
Implications for Practice

We conclude by considering the implications for HR practice. Firstly, our study points to the key roles which both TCNs and inpatriates clearly play in MNEs. Thus, in the context of the current reappraisal of global staffing practices in MNEs (Collings et al., 2007), both inpatriates and TCNs should be considered as part of the emerging portfolio of global staffing options available to MNEs. Other options include short-term assignments, frequent business trips, commuter and rotational assignments and virtual teams. Adopting a portfolio approach to global staffing may help MNEs meet many of the emerging challenges which they face with respect to staffing their global organizations.

We argue that inpatriates in particular represent an important staffing option for MNEs in their quest for ‘transnational’ capabilities (Bartlett & Ghoshal, 1990). As Harvey et al. (1999) note, inpatriates can act as important “linking pins” between foreign subsidiaries and HQ. Indeed, their boundary spanning role (Harvey et al., 2001) between the HQ and subsidiary facilitates increased knowledge of subsidiary operations in the HQ, while on repatriation they can transfer knowledge about the corporate culture, routines and processes to their subsidiary facilitating corporate integration (Bonache et al, 2001; Lazarova & Tarique, 2005). Given the increasing realisation that knowledge is embodied in individuals (Felin & Hesterly, 2007) and highly contextual and tacit in nature (Riusala & Suutari, 2004) inpatriate assignments represent an important transmission channel for subsidiary knowledge to the HQ and vice versa on repatriation (Reiche, Kraimer & Harzing, 2009). Indeed, Gammelgaard, Holm and Petersen (2004) go as far as to argue that the success of MNEs is contingent on the speed and ease with which such knowledge is transferred around the organization. As Reiche et al. (2009: 160) argue owing to inpatriate’s “intimate understanding of both the HQ and the local subsidiary context…they are able to cross existing intra-organizational, cultural, and communications boundaries to diffuse information”.

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Additionally, inpatriates can help co-ordinate and control subsidiary operations which is also identified as a key strategic objective of international HR systems and global staffing more generally (see Collings et al., 2009; Gong, 2003; Schuler, Dowling and DeCieri, 1993). More particularly, their socialization into the HQ may contribute toward informal and subtle control of subsidiaries through social control which is acceptable to both HQ and local employees (see Reiche et al, 2009). Thus inpatriates represent an important means though which MNE can increase their transnational capabilities and performance on the global scale.

Given that our study points to differences between the antecedents of flows of inpatriates and TCNs, and despite the fact that our data do not allow us to explore the reasons why such assignees are deployed, we argue that organizations should develop distinct HR policies to support such assignments. Thus, a key challenge for practitioners in MNEs will be to develop effective international HRM policies to support different types of international assignments. We have argued elsewhere (Collings et al., 2007) that a standardized approach to international assignments is not appropriate and that it is essential to develop HR policies and procedures that reflect differences in the various forms of international assignment.

Our study also points to the significance of HR systems in facilitating outward staffing flows. For MNEs with a desire to be transnational and to simultaneously grasp the opportunities for global coordination and local responsiveness (Bartlett & Ghoshal, 1990), it appears that having such systems in place is a key pre-requisite to maximise the utilization of subsidiary resource through staffing flows. Hence our findings suggest that organizations should continue to embrace technology and particularly HRIS and global talent tracking systems to monitor their global staffing flows and develop an efficient and effective global talent management system. Indeed, the strong association between HR systems factors and inpatriate deployment illustrates the key role played by technology and other HR systems in the strategic deployment of key talent in the MNE.
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Author Biographies

Dr. David Collings is senior lecturer in International Management at the National University of Ireland, Galway. His research interests focus on management in multinational corporations with a particular emphasis on staffing, talent management, and industrial relations issues. His work in these areas has been published in outlets such as the Journal of World Business, International Journal of Human Resource Management, and Human Resource Management Review. He has edited five books, most recently Human Resource Management: A critical approach, with Geoff Wood (Routledge, 2009). He serves on several editorial boards including the Journal of World Business and is editor of the Human Resource Management Journal (Blackwell Publishing).

Dr. Anthony McDonnell is research fellow at the Centre for Institutional and Organisational Studies, University of Newcastle, Australia. He is a previous Government of Ireland Irish Research Council for the Humanities and Social Sciences Scholar and CRH Ireland Canada University Foundation Scholar. He has published in the Journal of World Business, Human Resource Management Journal, and Human Relations. His research interests include talent management, global staffing, work organization in call centers and, more generally, human resource management in multinational enterprises.

Dr. Patrick Gunnigle is professor of Business Studies at the Kemmy Business School, University of Limerick, Ireland. A former Fulbright Scholar, Paddy has authored/co-authored 17 books and more than 100 refereed journal papers and book chapters. He is a previous co-editor of the Irish Journal of Management, and current editorial board member at the Industrial Relations Journal, the Human Resource Management Journal and Employee Relations. He holds visiting professor appointments at Paris II University and the University of Cadiz, is external examiner at the University of Bath, University College Cork and the University of Ulster, and has examined doctoral theses at a number of international universities. His main research interests include HRM in multinational companies and trade union membership and recognition.
Dr. Jonathan Lavelle is a research scholar at the Kemmy Business School, University of Limerick. He earned a Ph.D. in employment relations from the University of Limerick. His current research focuses on employment relations in multinational companies, employee representative issues, and multinational company investment. He has published papers in the *Economic and Social Review*, the *Irish Journal of Management, Advances in Industrial and Labor Relations, Human Resource Management Journal* and *Human Relations*. 
References


Table I: Independent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country of origin</td>
<td>U.S. (n = 101); UK (n = 35); Germany (n = 19); Rest of Europe (n = 44); Rest of World (n = 14). Rest of the world category is excluded in regressions due to small cell sizes.</td>
</tr>
<tr>
<td>MNE size</td>
<td>Employment of the ultimate controlling company. 500 - 4999 (n = 47); 5000 – 29999 (n = 75); 30000 – 59999 (n = 34); 60000+ employees (n = 57).</td>
</tr>
<tr>
<td>Sector</td>
<td>Sectors of activity of the MNE in Ireland. Manufacturing (n = 91); Services (n = 105); Multi-sector (n = 17).</td>
</tr>
<tr>
<td>Method of establishment</td>
<td>Method of establishment of the current worldwide company in Ireland. Greenfield (n = 138); Acquisition/merger (n = 74).</td>
</tr>
<tr>
<td>Years operating in Ireland</td>
<td>Interval variable of the number of years the current worldwide company has been established in Ireland.</td>
</tr>
<tr>
<td>Subsidiary size</td>
<td>Employment in the Irish operations. 100 – 499 (n = 129); 500 – 999 (n = 34); 1000+ employees (n = 50).</td>
</tr>
<tr>
<td>Headquarters role</td>
<td>This variable details whether the Irish operations play a HQ role for any international product/service brand based divisions; regions; or global business functions. Yes (n = 38); No (n = 174).</td>
</tr>
<tr>
<td>International integration</td>
<td>Explores level of international integration between operations in the creation of products/services. No integration (n = 30); One way integration (n = 46) signifies the foreign operations supply (products/services) to the Irish operations or the Irish operations supply the foreign operations; Two way integration (n = 132) where both the Irish and foreign operations supply one another.</td>
</tr>
<tr>
<td>International business structures</td>
<td>This explores the existence of (1) International product/service/brand based divisions, (2) Regions, (3) Global business functions. Our variable consists of: No international structures (n = 15); Simple international structure, i.e., one structure (n = 42); Matrix international structure, i.e., two or more structures (n = 155).</td>
</tr>
<tr>
<td>Global Succession Planning</td>
<td>Are the Irish operations covered by a global succession planning system? Yes (n = 126); No (n = 80).</td>
</tr>
<tr>
<td>HR Information System (HRIS)</td>
<td>Is there a HRIS that holds data on the international workforce? Yes (n = 116); No (n = 92).</td>
</tr>
<tr>
<td>HR Policy Formation Body</td>
<td>Measures the existence of a HR policy formation body in worldwide company and whether there is an Irish representative. No body (n = 87); Irish representative on body (n = 64); No Irish representative on body (n = 62).</td>
</tr>
<tr>
<td>Expatriate inflows</td>
<td>Establishes whether there are expatriates from the parent country HQ or other worldwide operations on assignment in the Irish operations.</td>
</tr>
</tbody>
</table>
Table II: Logistic Regression – Inpatriates

<table>
<thead>
<tr>
<th></th>
<th>Odds Ratio</th>
<th>Coefficient (Standard Error)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country of origin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. (ref.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany**</td>
<td>.066</td>
<td>-2.718 (1.232)</td>
<td>.027</td>
</tr>
<tr>
<td>Rest of Europe</td>
<td>1.352</td>
<td>.302 (.674)</td>
<td>.654</td>
</tr>
<tr>
<td>MNE size</td>
<td></td>
<td></td>
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<tr>
<td>500 – 4,999 employees (ref.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,000 – 29,999 employees</td>
<td>1.144</td>
<td>.134 (.729)</td>
<td>.854</td>
</tr>
<tr>
<td>30,000 – 59,999 employees</td>
<td>1.704</td>
<td>.533 (.952)</td>
<td>.576</td>
</tr>
<tr>
<td>&gt; 60,000 employees*</td>
<td>4.633</td>
<td>1.533 (.861)</td>
<td>.075</td>
</tr>
<tr>
<td>Sector</td>
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<td></td>
</tr>
<tr>
<td>Manufacturing (ref.)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Services***</td>
<td>.207</td>
<td>-1.576 (.610)</td>
<td>.010</td>
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<tr>
<td>Multi-sector</td>
<td>1.425</td>
<td>.355 (.815)</td>
<td>.664</td>
</tr>
<tr>
<td>Method of establishment</td>
<td></td>
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<tr>
<td>Greenfield (ref.)</td>
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<td></td>
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<tr>
<td>Acquisition/merger***</td>
<td>7.313</td>
<td>1.990 (1.726)</td>
<td>.006</td>
</tr>
<tr>
<td>Years operating in Ireland</td>
<td>1.010</td>
<td>.010 (.022)</td>
<td>.636</td>
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<td>Subsidiary size</td>
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<tr>
<td>100 – 499 employees (ref.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500 – 999 employees</td>
<td>.556</td>
<td>-586 (.849)</td>
<td>.400</td>
</tr>
<tr>
<td>&gt; 1,000 employees*</td>
<td>3.335</td>
<td>1.204 (.643)</td>
<td>.061</td>
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<tr>
<td>Headquarter role</td>
<td>1.087</td>
<td>.083 (.620)</td>
<td>.893</td>
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<tr>
<td>International integration</td>
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<td></td>
<td></td>
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<tr>
<td>Two way integration (ref.)</td>
<td>.461</td>
<td>-.774 (.745)</td>
<td>.299</td>
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<tr>
<td>One way integration</td>
<td>1.133</td>
<td>-2.019 (.893)</td>
<td>.024</td>
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<tr>
<td>International business structure</td>
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<tr>
<td>One international business structure</td>
<td>5.70</td>
<td>-.562 (.751)</td>
<td>.442</td>
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<td>No international structures</td>
<td>1.826</td>
<td>.602 (1.529)</td>
<td>.694</td>
</tr>
<tr>
<td>Global succession planning**</td>
<td>3.169</td>
<td>1.153 (.569)</td>
<td>.043</td>
</tr>
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<td>HR information system**</td>
<td>4.103</td>
<td>1.412 (.629)</td>
<td>.025</td>
</tr>
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<td>HR policy formation body</td>
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<tr>
<td>No body (ref.)</td>
<td>2.581</td>
<td>.948 (.567)</td>
<td>.095</td>
</tr>
<tr>
<td>Irish representative on body*</td>
<td>2.39</td>
<td>-1.433 (.767)</td>
<td>.062</td>
</tr>
<tr>
<td>No Irish representative on body*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expatriate inflows**</td>
<td>4.207</td>
<td>1.437 (.563)</td>
<td>.011</td>
</tr>
</tbody>
</table>

N = 178
Model chi square 93.921***
Nagelkerke R² .587
Levels of significance are denoted as follows: * 10% level; ** 5% level; *** 1% level.
### Table III: Logistic Regression – Third Country Outflows

<table>
<thead>
<tr>
<th>Country of origin</th>
<th>Odds Ratio</th>
<th>Coefficient (Standard Error)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. (ref.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK***</td>
<td>.065</td>
<td>-2.726 (.796)</td>
<td>.001</td>
</tr>
<tr>
<td>Germany</td>
<td>.352</td>
<td>-1.045 (.737)</td>
<td>.156</td>
</tr>
<tr>
<td>Rest of Europe</td>
<td>.400</td>
<td>-.916 (.568)</td>
<td>.107</td>
</tr>
<tr>
<td><strong>MNE Size</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500 – 1,999 employees (ref.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,000 – 29,999 employees</td>
<td>.394</td>
<td>-.931 (.593)</td>
<td>.116</td>
</tr>
<tr>
<td>&gt; 30,000 employees</td>
<td>1.178</td>
<td>.163 (.805)</td>
<td>.839</td>
</tr>
<tr>
<td><strong>Sector</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing (ref.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>1.328</td>
<td>.284 (.488)</td>
<td>.561</td>
</tr>
<tr>
<td>Multi-sector</td>
<td>.360</td>
<td>-1.023 (.790)</td>
<td>.195</td>
</tr>
<tr>
<td><strong>Method of establishment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greenfield (ref.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition/merger</td>
<td>1.880</td>
<td>.631 (.531)</td>
<td>.235</td>
</tr>
<tr>
<td><strong>Years operating in Ireland</strong></td>
<td>994</td>
<td>-.006 (.017)</td>
<td>.704</td>
</tr>
<tr>
<td><strong>Subsidiary Size</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 – 499 employees (ref.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500 – 999 employees</td>
<td>.988</td>
<td>-.012 (.620)</td>
<td>.955</td>
</tr>
<tr>
<td>&gt; 1,000 employees**</td>
<td>3.492</td>
<td>1.250 (.580)</td>
<td>.031</td>
</tr>
<tr>
<td><strong>Headquarter role</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Two way integration (ref.)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>One way integration*</td>
<td>.373</td>
<td>-.987 (.581)</td>
<td>.089</td>
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<tr>
<td>No integration</td>
<td>1.649</td>
<td>.500 (.714)</td>
<td>.484</td>
</tr>
<tr>
<td><strong>International business structure</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Matrix international business structure (ref.)</td>
<td>.283</td>
<td>-.263 (.627)</td>
<td>.044</td>
</tr>
<tr>
<td>No international business structures</td>
<td>.670</td>
<td>-.400 (1.081)</td>
<td>.711</td>
</tr>
<tr>
<td><strong>Global succession planning</strong></td>
<td>3.668</td>
<td>1.300 (1.486)</td>
<td>.008</td>
</tr>
<tr>
<td><strong>HR information system</strong></td>
<td>1.964</td>
<td>.675 (.479)</td>
<td>.159</td>
</tr>
<tr>
<td><strong>HR policy formation body</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No body (ref.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irish representative on body</td>
<td>1.362</td>
<td>.309 (.506)</td>
<td>.541</td>
</tr>
<tr>
<td>No Irish representative on body</td>
<td>.620</td>
<td>-.478 (.593)</td>
<td>.421</td>
</tr>
<tr>
<td><strong>Expatriate inflows</strong>*</td>
<td>6.275</td>
<td>1.837 (.469)</td>
<td>.000</td>
</tr>
</tbody>
</table>

N=177

Model chi square 75.607***

Nagelkerke R² .471

Levels of significance are denoted as follows: * 10% level; ** 5% level; *** 1% level.
FIGURE 1: A MODEL OF OUTWARD STAFFING FLOWS IN MNEs

**Headquarters Factors**
- Country of origin
- MNE size
- Sector

**Subsidiary Factors**
- Method of establishment
- Age of subsidiary
- Subsidiary size
- Headquarter role

**Structural Factors**
- International integration
- International structures

**HR Systems Factors**
- Global succession planning system
- Human resource information systems
- HR policy formation body
- Expatriate inflows

Staffing flows to
HQ (inpatriates)

Staffing flows to third country operations (TCNs)
1 Peterson (2003) considered the utilisation of inpatriation in subsidiaries in central and eastern Europe, however his definition of inpatriate does not fit with the more commonly utilized one because he also included those sent to third country operations, individuals whom we define as TCNs. Nonetheless he did differentiate those sent to HQ and the numbers were small.

2 While the term international assignee is sometimes deployed in ethnocentric terms to refer to PCN expatriates, we use it in more general terms to indicate international flows of staff more generally.

3 Although Torbiorn (2005) did not use the term inpatriate, his argument was consistent with the concept of inpatriate adopted in the current paper